

Field Report

Delaware Water Gap

National Recreation Area

■ 1.0 Summary

The Delaware Water Gap National Recreation Area (NRA) is a linear park of 67,210 acres in northwestern New Jersey and northeastern Pennsylvania. The park includes 40 miles of the Delaware River and the neighboring valley and mountains. Congress designated the site as a NRA in 1965 and in 1978 designated the section of the Delaware River within the NRA part of the National Wild and Scenic Rivers System. The mission of the Delaware Water Gap NRA, as stated in the draft management plan amendment, is “to provide outdoor recreation opportunities while conserving the natural, cultural and scenic resources of the recreation area.” Approximately 5 million people visit the site each year to participate in a range of recreational activities, including hiking, biking, fishing, hunting, camping, picnicking, water sports, and winter sports. There are three visitor centers in the NRA in addition to educational facilities providing a range of visitors programs.

Despite environmental constraints, current and planned visitor use patterns, and the geography of the park, there is still some potential for alternative transportation systems. Key alternatives are summarized below:

- **Tourist Shuttle Within Park** – The park could operate a tourist shuttle service, which could run loops through different sections of the NRA. In this way, the shuttles could distribute visitors and reduce opportunities for large concentrations of visitors.
- **Commuter Rail Connections** – Presently, several New Jersey and Pennsylvania counties are undertaking an assessment of restoring passenger rail service from Scranton, Pennsylvania to Hoboken, New Jersey through the southern end of the park. Current plans for the line show a station adjacent to I-80 just outside of the park boundaries. Park users who arrive by rail could use shuttle buses to access the park’s facilities. The park also anticipates building trail connections to the station.
- **Biking** – Initiatives are being undertaken by the NPS and adjacent townships and counties, which could be expanded to link existing biking paths and facilities and provide an integrated bike transportation network in the region.
- **Equestrian** – The NPS is considering the possibility of expanding its equestrian trail system. One option includes links to the adjacent State Forest site. Additional connectivity would be required from adjacent communities and stables for more complete equestrian access and usage.

- **Park-and-Ride** – Plans for a park-and-ride system by Monroe County, Pennsylvania are being considered. The park-and-ride would be located on the site of a weekly weekend flea market on U.S. 209 in Marshall's Creek. The project is currently in the planning phase. The facility could be used as a staging area for park users who could be transported via shuttle bus on a regularly scheduled service to NRA visitor centers.
- **Signage** – Currently, the signage to the NPS is minimal and what exists is confusing. Both the quantity and quality of signage to the NRA and within the NRA should be improved to reduce unnecessary traffic.

■ 2.0 Background Information

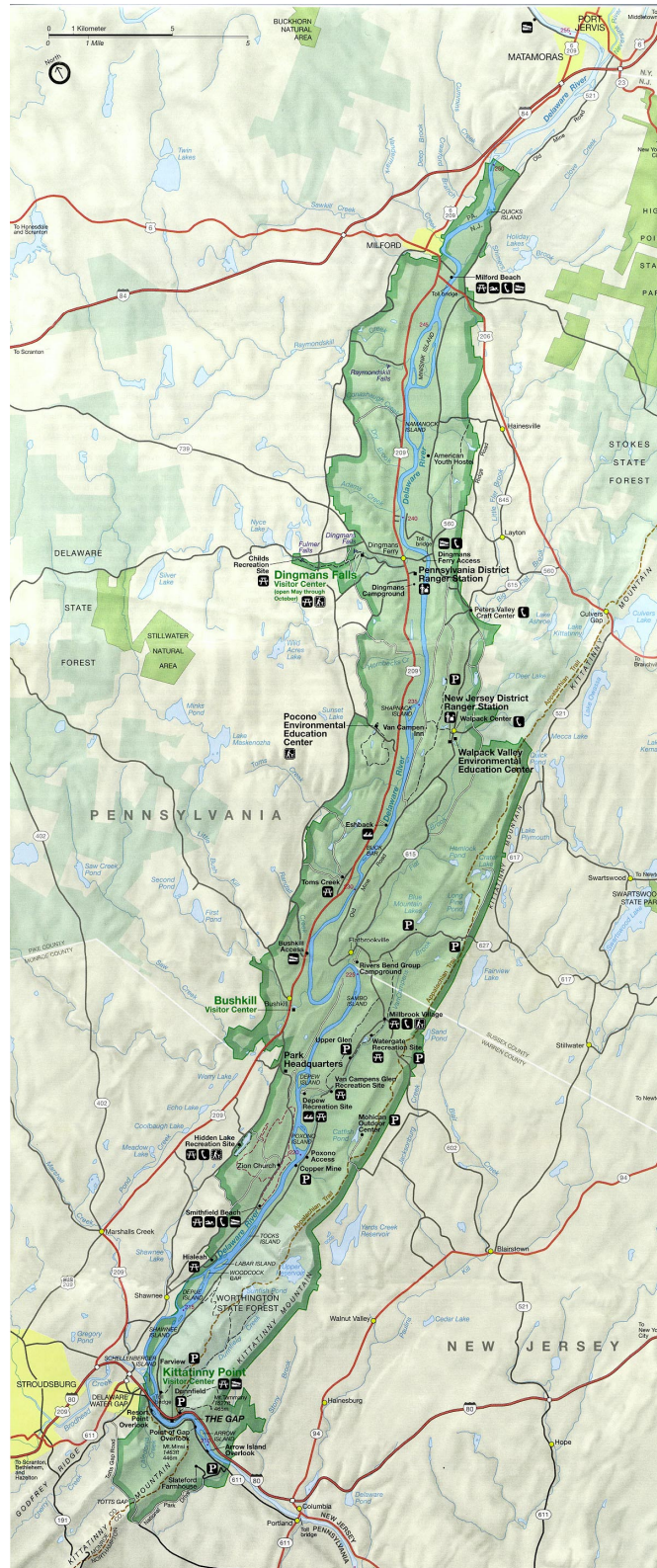
2.1 Location

The Delaware Water Gap NRA is located in northeastern Pennsylvania and northwestern New Jersey running approximately 40 miles along both the east and west sides of the Delaware River (see Figure 1). At the southern tip of the site, the river cuts through a picturesque water gap in the Appalachian Mountains. Interstate 84 runs east-west just to the north of the park. Interstate 80, which runs parallel to I-84, cuts across the southernmost tip of the site. U.S. 209 runs north-south through much of the park (see Figure 2).

Figure 1. Delaware River



Figure 2. Map of Delaware Water Gap NRA



The communities located near the NRA include Stroudsburg, Pennsylvania; Delaware Water Gap, Pennsylvania; Milford, Pennsylvania; Shawnee-on-Delaware, Pennsylvania; Portland, Pennsylvania; Blairstown, New Jersey; and Columbia, New Jersey. The Delaware Water Gap NRA falls into five counties, Sussex and Warren Counties in New Jersey; and Pike, Monroe, and Northampton Counties in Pennsylvania. Scranton, Pennsylvania is located 55 miles to the northwest of the NRA and Newark, New Jersey is located 80 miles to the east; and New York City is located about 100 miles to the east.

2.2 Administration and Classification

The Delaware Water Gap NRA has been a unit of the NPS for 34 years. Land for the park originally was acquired and assembled for the Tocks Island Dam and Reservoir, a water supply and flood control project. In 1965 Congress designated the land around the proposed reservoir as an NPS unit. The land and waters in which the reservoir was to be built were managed by the Army Corps of Engineers. Between 1965 and 1979 many of the existing structures on the park grounds were destroyed by the Army Corps to prepare for the construction of the dam and reservoir. Residents relocated to neighboring communities. That land was turned over the NPS in 1978 for oversight and management and the Tocks Island reservoir was de-authorized in 1992.

In 1978, Congress designated the portion of the Delaware River that runs through the park as a unit of the National Wild and Scenic Rivers System.

2.3 Physical Description

Key attractions of the 67,210-acre NRA include the Delaware River, mountains, trails, and several historical sites. There are over approximately 112 miles of hiking trails, which include hiking trails up Mount Tammany (1,527 feet) and Mount Minsi (1,463 feet). A significant amount of park activity is concentrated at developed recreational sites, including swimming, picnicking, and boating. There are three visitor centers located on the grounds of the NRA, as well as Park Headquarter buildings. Currently, the Dingmans Falls Visitor Center is closed. Millbrook Village hosts regular blacksmithing and woodworking demonstrations. Three bridges cross the Delaware River within the park boundaries at Milford, Pennsylvania; Dinghams Ferry, Pennsylvania; and I-80 at the Delaware Water Gap, Pennsylvania.

2.4 Mission and Goals of the Site

The mission of the Delaware Water Gap NRA, as stated in the draft management plan amendment, is “to provide outdoor recreation opportunities while conserving the natural, cultural and scenic resources of the recreation area. In doing so, the park will work cooperatively with surrounding communities and the public to achieve the conservation goals of the Delaware River region.”

The draft management plan amendment also includes the NRA goals, which are to:

- Provide for public outdoor recreation use and enjoyment, assuring that such use and enjoyment has a minimal impact on the park's natural and cultural resources.
- Preserve the natural resources contributing to public enjoyment of park lands and waters, and promoting biological diversity.
- Preserve the cultural resources contributing to public enjoyment of park lands and waters.
- Preserve the scenic resources contributing to the public enjoyment of park lands and waters.
- Manage the park in an efficient, cost-effective manner in order to attain the goals specified above.

The original management plan also states that the primary goal of the Delaware Water Gap NRA is to provide the widest possible range of recreational opportunities without allowing natural or cultural resources to be degraded as a result. This perspective was reinforced by NRA staff.

2.5 Visitation Levels and Visitor Profile

The site is one of the most visited sites in the NPS system, with an estimated 5,019,175 visitors in 1998. The Delaware Water Gap NRA has experienced a four-fold increase in visitation from 1.2 million recreational visits in 1976 to 5 million in 1998. Some sites in the NRA experience over 1,000 visitors per day on summer weekends. More than one-third (36 percent) of annual park visits occur during the summer months of June, July, and August. Weekends have significantly higher visitation than weekdays.

The vast majority of NRA visitors (89 percent) are from New Jersey, Pennsylvania, and New York. About 60 percent are repeat visitors, and two-thirds of visitors come in groups of two to four. Visitors typically spend between four and eight hours in the park.

■ 3.0 Existing Conditions, Issues and Concerns

3.1 Transportation Conditions, Issues and Concerns

Most visitors travel to and within the NRA by private automobile because:

- The numerous features of the park are dispersed over a large area with limited opportunities for crossing the site from east to west;
- Connections are absent between the NRA and rail and bus transport in the surrounding communities; and
- It is the vision of the park staff to continue to disperse activities rather than concentrate visitor activities at specific sites.

Other key transportation issues include the following:

- **Entry points** – There are over 50 points of entry to the NRA, including interstate highways, state roads, local roads, and river access at both the northern and southern boundaries of the NRA. The number of sites makes it difficult for the staff to provide guidelines and orientation to visitors and to monitor visitor activities.
- **Bus and rail** – Metropolitan Transportation Authority (MTA) Metro-North Railroad runs from Port Jervis, New York (3.5 miles north of the park boundary) to Hoboken, New Jersey. Bus service is provided by Martz Bus Lines with service to New York City and northern New Jersey. Buses depart from several of the gateway communities with some routes running through the park on U.S. 209 and I-80.
- **Transit** – There is some transit service provided by liveries (e.g., private service providers of canoes and canoe rides, which shuttle people in and out of the park) to the park, but there are none operated by the NPS staff.
- **Tour buses** – There are very few tour buses that drive through the NRA. Some charter bus services transport groups for special tours.
- **Trolley** – A tourist trolley operates within the town of Delaware Water Gap. The trolley tour includes parts of the NRA. However, the speed is slow and there are limited numbers of pull-off areas to reduce backups on the roads.
- **Commuter traffic** – The NRA must contend with a significant amount of commuter traffic from private autos along I-80 and I-84; many people access these Interstates and other state and local roads within or adjacent to the park.

- **Congestion** – The gateway communities have expressed concern over the growing congestion problems in the region, but the economic benefit of increased visitation appear to outweigh the concerns about traffic. One significant nearby congestion point, Marshall’s Creek, U.S. 209, is in the federal project development process, and construction of a bypass route is expected in the next few years.
- **Park roads** – Some of the roads within the park are in very good condition (see Figure 3), but others are in poor condition and require resurfacing or reconstruction.

Figure 3. Typical Park Road



- **Parking** – There are approximately 220 designated parking spots spread over 23 developed lots in the NRA. The majority of these sites are located at Milford and Dingman’s Launch. On peak days, the parking lots are full. In addition to the developed parking lots, there are many locations, such as roadside pull-offs and abandoned home sites, where parking is not defined but occasionally is permitted.
- **Biking** – Some biking trails are available for recreational biking, including the recently opened Blue Mountain Lake Mountain Bike Trail. An estimated 3,500 bikers use the trails annually. However, biking facilities are inadequate to accommodate the high demand. Many roads are not safe for both bicycle and automobile traffic. The draft General Management Plan Amendment provides scenarios to better accommodate bicycle traffic.
- **Equestrian** – The horseback riding trail in Pennsylvania is relatively new. Approximately 500 equestrians visit the park with their horses each year. The NPS staff is exploring equestrian trail linkages in their draft General Management Plan amendment.

- **Signage** – Signage and adequate information to access locations within the park is limited and needs improvement.
- **Water transport** – Prior to the bridges across the Delaware River, ferry services transported many vehicles across the river. However, it is unlikely that today such a service would be cost-effective.

3.2 Community Development Conditions, Issues and Concerns

The character of the surrounding community has changed significantly over the last 15 years due to increasing development. Increasing numbers of residential and resort units have led to commercial development along the major corridors bordering the park. Three of the five counties in which the NRA is located are among the fastest growing counties in their respective states. Despite increased commercial development in the region, there are no large scale manufacturing or industrial complexes planned for the immediate future. Park staff are involved with surrounding communities on specific project planning initiatives. However, this function is ad hoc, as the position of community planner for the park is currently vacant.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

The Delaware Water Gap hosts two distinct landforms – the river valley and the ridge. The elevation of the valley ranges from 300 to 400 feet above sea level. The highlands of the ridge extend an additional 600 to 1,000 feet. Much of the land in the river valley is prime agricultural land. Three thousand acres of this land is leased to farmers through special use permits. There are 37 watersheds associated with tributaries to the Delaware River within the NRA boundaries and approximately 700 wetlands, lakes, and ponds. The water quality of the river is very high, which allows for safe consumption by wildlife and recreational use by visitors.

The Delaware Water Gap NRA is also home to a variety of bird species and wildlife. The river is an important path for a variety of migratory birds. Species such as the bald eagle, the black bear, and Canada geese are the focus of special attention by the NPS staff and NRA visitors.

Nineteen individual properties and four historic districts containing 58 major structures are listed on the National Register of Historic Places. In addition there are many other buildings that are eligible for listing on the Register. Walpack Center and Peters Valley are two unique historical villages within the park boundaries; partial villages can be found at Bushkill, Egypt Mills, Flatbrookville, and Dingman's Ferry.

3.4 Recreational Conditions, Issues and Concerns

On-site recreational activities include:

- Water sports, such as canoeing and swimming;
- Camping, picnicking, biking;
- Fishing, hunting;
- Hiking, bird watching, and viewing wildlife, geological sites, natural landscape, and historical structures;
- Winter sports, including cross-country skiing, snowmobiling, snow shoeing, ice fishing, ice skating, and ice climbing; and
- Visiting the historic center of Millbrook Village, partaking in visitor programs at the education and tourist centers. Visitor centers are located in Bushkill in the central part of the NRA, Kittatinny Point in the southern tip of the park, and Dingmans Falls located in the northwestern part of the park.

Other recreational activities within the boundaries of the NRA include:

- The Appalachian Trail, which runs through approximately 25 miles of the NRA.
- Worthington State Forest.
- 32 park trails, which extend approximately 112 miles through the NRA.

There is no fee for entry to the NRA. Fees are charged at some beaches and other access points in the summer. Canoes and rafts can be rented from livery services in the area. Some not-for-profit organizations operate services from the park in addition to some for-profit concessions. Leasing of historic structures provides a small amount of income to the park and reduces the demands on the operating budget to care for and maintain the structures.

■ 4.0 Planning and Coordination

4.1 Unit Plans

The park relies primarily on its 1987 General Management Plan (GMP), however, a Trails Plan was completed recently which amends the 1987 GMP as it pertains to trails in the park. The Trails Plan was issued in draft form in June of 1999 and is expected to be final early in 2000. Another important document is the Strategic Plan for Delaware Water Gap NRA, ca. 1998.

4.2 Public and Agency Coordination

The park coordinates with 171 organizations. Among them are:

- Appalachian Mountain Club;
- Delaware Water Gap Equestrian Advisory Committee;
- Kittatinny Mountain Bike Association;
- New York-New Jersey Trail Conference;
- Delaware Water Gap Equestrian Advisory Committee; and
- Neighboring towns and communities.

■ 5.0 Assessment of Need

5.1 Magnitude of Need

Due to the dispersed nature of activities within the Delaware Water Gap NRA, there are limited opportunities for alternative transportation systems. Feasible alternatives are discussed below.

5.2 Feasible Alternatives

Feasible strategies for alternative transportation systems at the Delaware Water Gap NRA include the following:

- **Tourist Shuttle Within Park** – The park could operate a tourist shuttle service, which could run loops through different sections of the NRA. In this way, the shuttles could distribute visitors and help to disperse large concentrations of visitors. Initially, two small shuttles could operate and service different routes in the park. Well marked maps and pick up and drop-off points for the two services would facilitate use and allow for visitors to get out and access the trails and other resources. A ranger or volunteer could provide history or educational information during the tour. As demand for the service increases, additional routes could be added, which could be serviced by additional shuttles. Besides helping to keep visitors dispersed across the NRA, this service could reduce the volume of traffic on park roads, reduce overall traffic congestion, and avoid the need for development of additional parking.
- **Commuter Rail** – Several New Jersey and Pennsylvania counties are undertaking an Major Investment Study (MIS)/Environmental Assessment (EA) for restoring passenger rail service from Scranton, Pennsylvania to Hoboken, New Jersey through the southern end of the park. The route would be along the existing right-of-way in Pennsylvania and abandoned right-of-way in New Jersey. Current plans for the line

show a station adjacent to I-80 just outside of the park boundaries. Park users who arrive by rail could use shuttle buses to access the park's facilities. The park also anticipates building trail connections to the station. A similar rail-trail connection exists on MTA Metro-North's Harlem Line that connects directly to the Appalachian Trail and attracts 30 to 40 users per summer weekend.

- **Shuttle to Rail** – Linkages to Port Jervis, the neighboring Metro-North station, may be improved by providing shuttle services. Currently, no information is available to visitors arriving at this station and wanting to reach the park by taxi or rental car.
- **Biking** – Although opportunities for biking are limited at the present time, there is increasing usage and demand for improved facilities. Initiatives are being undertaken by the NPS and adjacent townships and counties, which could be expanded to link existing biking paths and facilities and provide an integrated bike transportation network in the park and region.
- **Equestrian** – The NPS is considering the possibility of expanding its existing 12-mile equestrian trail system. One option includes links to the adjacent State Forest site. Additional connectivity would be required from adjacent communities and stables for more complete access by horse.
- **Park-and-Ride** – There is a large amount of commuter traffic via automobile on I-80 and other routes heading towards New York City and additional urban locations. Plans for a park-and-ride system by Monroe County, Pennsylvania are being considered. The park-and-ride would be located on the site of a weekly weekend flea market on U.S. 209 in Marshall's Creek. Express bus service to New York would be required. The project is currently in the planning phase. The facility could be used as a staging area for park users who could be transported via shuttle bus on a regularly scheduled service to NRA visitor centers.
- **Signage** – Currently, the signage to the NPS is minimal and what exists is confusing. Many signs from the interstate indicate the exit to the Delaware Water Gap. However, the destination referenced to is the Borough of the Delaware Water Gap, not the actual Gap (a specific location along the river) or the Delaware Water Gap NRA. Both the quantity and quality of signage to the NRA and within the NRA should be improved to reduce unnecessary traffic.
- **Livery Services** – Local service providers (e.g., livery services for canoeing, etc.) should be encouraged as they provide a transit service into the park that the park itself is not currently able to provide.

■ 6.0 Bibliography

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■ 7.0 Persons Interviewed

Bob Kirby, Assistant Superintendent, Delaware Water Gap NRA

Jacki Katzmire, Natural Resources Specialist, Delaware Water Gap NRA

Michael Mrozinski, Community Planning Director, Pike County Community Planning and Human Development